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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,936	04/24/2002	Yasushi Watanabe	02500.000010	8758

5514 7590 07/07/2003

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EXAMINER

GORMAN, DARREN W

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 07/07/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,936

Applicant(s)

WATANABE ET AL.

Examiner

Darren W Gorman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-10 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 06 June 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on June 6, 2003 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto et al., USPN 5,996,902, in view of Metz, USPN 4,462,547.

Morimoto et al discloses a powdered material spraying device comprising: a powdered material storage hopper (2) for storing a powdered material (h), the storage hopper having a material discharge port (no reference number) and a material feed port (no reference number), the material feed port bearing an airtight, detachable cover (no reference number), a quantitative spraying device (no reference number) provided for the material discharge port of the powdered material storage hopper via a material feed valve (21), the quantitative spraying device comprising: a cylindrical body (no reference number) with openings at a top end (no reference

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number) and at a lower end (no reference number) respectively, the cylindrical body being airtightly connected at the top end with the material discharge port of the powdered material storage hopper, an elastic membrane (3) with a penetrating aperture (3a) provided so as to form a bottom (no reference number) of the cylindrical body at its lower opening end, and a dispersion chamber (6) connected under the lower opening end of the cylindrical body via the elastic membrane, wherein the dispersion chamber comprises: a pulsating vibration air supply port (outlet end of 10) for supplying a positive pulsating vibration air to the dispersion chamber, and a discharge port (inlet of 11) connected with a conduit (11) for pneumatically transporting the powdered material to a tableting machine by means of the positive pulsating vibration air, the powdered material being discharged into the dispersion chamber via the penetrating aperture when the elastic membrane is vibrated up and down by the positive pulsating vibration air supplied in the dispersion chamber from the pulsating vibration air supply port and being dispersed by the positive pulsating vibration air supplied in the dispersion chamber (see Figures 1-3 and 5-6).

However, Morimoto et al. does not disclose a bypass pipe connected between the cylindrical body and the dispersion chamber, so as to equalize pressure between the cylindrical body and the dispersion chamber.

Metz discloses a material spraying device with a material hopper (13) with a material discharge valve means (37) selectively releasing material into a holding tank (30), then transferring the material to a pump (16) where the material is pressurized and transferred to a conduit (36) (see Figure 2). Metz discloses a bypass pipe (38) between conduit (36) and holding

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tank (30) which returns a portion of the material in conduit (36) should a preset pressure be exceeded (see Figure 2; and column 4, lines 19-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a bypass pipe, as taught by Metz, with the powdered material spraying device of Morimoto et al. in order to regulate the desired pressure between the cylindrical body and the dispersion chamber so that pressure in the dispersion chamber does not exceed an operable condition.

Allowable Subject Matter

4. Claims 5-10 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art, alone or in combination, did not teach a powdered material spraying device including an elastic membrane installation device comprising a pedestal with a hollow part, a push-up member with a hollow part provided so as to rise on a surface of the pedestal, and a presser member with a hollow part, the presser member being a little larger than an outer circumference of the push-up member, the pedestal having a V-groove outside of its hollow to be outside of the outer circumference of the push-up member so as to annularly surround the hollow of the pedestal, together with the other elements of Applicant's invention as set forth in claim 5.

The prior art, alone or in combination, did not teach a powdered material spraying device including the pulsating vibration air supply port provided at a lower part of the dispersion chamber in a substantially tangential direction against an internal circumference of the dispersion

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chamber, the discharge port being provided at an upper port of the dispersion chamber in a substantially tangential direction against the internal circumference of the dispersion chamber, together with the other elements of Applicant's invention as set forth in claim 8.

6. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed regarding contrast between the bypass pipe as taught by the prior art cited in the Office Action filed February 3, 2003, in paper # 7, and the bypass pipe of the present invention according to claim 1, have been fully considered but they are not persuasive.

Examiner agrees with Applicants statement that the bypass pipe as taught by Metz (USPN 4,462,547) has a back pressure regulator (17), and that the bypass pipe reduces the pressure in the conduit (36) when pressure caused by the pump exceeds a preset pressure, and that when the preset pressure is exceeded, "a portion of the material in the line is moved through pipe (38) into the holding tank (30)" (see column 4, lines 19-21 of Metz reference). Applicant's argument that the bypass pipe in the present invention is different because "the bypass pipe in the present invention has no regulator and material passed through the penetrating aperture of the elastic membrane does not enter the cylindrical body through the bypass pipe" is not relevant. Since the air pressure in the conduit (36) of Metz is relieved via the back pressure regulator (17)

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when a preset pressure threshold is exceeded, and the excess pressure from the conduit (36) then passes through the bypass pipe (38) and back to the material holding tank, clearly Metz teaches air pressure equalization between the conduit and the holding tank. The fact that portions of the actual material carried by the pressurized air are moved through the bypass pipe and back to the holding tank is irrelevant, since it is the pressure of the air carrying the material that is being equalized between the conduit and the holding tank in the device of Metz.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W Gorman whose telephone number is 703-306-4205. The examiner can normally be reached on M-F 8:00-4:30.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on 703-308-2087. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

Darren W Gorman
Examiner
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DWG 7/3/03
DWG
July 3, 2003


7-3-03
MICHAEL MAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700